DOCUMENT RESUME

ED 049 159 SP 004 719

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TITLE	Putting Student Teaching in Context.
INSTITUTION	Chicago Univ., Ill.
PUB DATE	71
NOTE	26p.; Paper presented at AERA annual meeting, New York, 1971
EDRS PRICE	EDRS Price MF-$0.65 HC-$3.29
DESCRIPTORS	*Classroom Environment, *Role Perception, *Student Teachers, *Teacher Attitudes, *Teacher Behavior, Teacher Role
IDENTIFIERS	COR, Edwards Personal Preference Schedule, EPPS, Minnesota Teacher Attitude Inventory, MTAI, Ryans Classroom Observation Record, Teacher Role Description, TRD

ABSTRACT

A study attempted to detect any significant relationships between student teachers' perceptions of their roles as teachers, their needs and attitudes, their observed behavior in the classroom setting, and their students' perceptions of the classroom climate. Student teachers (N=39) were administered the Minnesota Teacher Attitude Inventory (MTAI), Edwards Personal Preference Schedule (EPPS), and Teacher Role Description (TRD). My Class Inventory was used as a pre-posttest in four classrooms and posttest in 11 more. Systematic observations using Ryan's Classroom Observation Record (COR) were made on part of the total sample. Summary and conclusions: There was a decrease in satisfaction in classroom climate during the student teaching period. There was no clear relationship between student teachers' perceptions of role, personality, needs, attitudes toward children, and classroom climate measures. Student teachers become more initiating, democratic, and broader in their presentations over time with a significant overall shift in behavior toward the "better" side of the scales. Teacher behavior is significantly related to classroom climate with no clear difference between early or late measures. Climate measures taken together are significantly related to each of Ryans' patterns of teacher behavior. There are significant relationships between certain patterns of teacher behavior and perception of role. Behavior related significantly to some needs and attitudes. (JS)

ED049159

PUTTING STUDENT TEACHING IN CONTEXT

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Presented at the Meeting of the American Educational Research Association, New York, February, 1971

SP004719

PUTTING STUDENT TEACHING IN CONTEXT

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Providing prospective teachers with realistic classroom experiences has been a part of teacher training since about 1839,[1] although it was advocated as early as 1789.[2] From then to the present day, student teaching continues to be a basic element in most teacher training programs.

The importance of the experience has been subjected to periodic evaluation by individual institutions and by national organizations. Many of these surveys reported that practice teachers are not able to effect changes in their practice classrooms in part because of traditions of rigidity by teachers and children and lack of cooperation by regular teachers.[3] Rigidity is not a cause of the problem, however, it is a description of an outcome. It derives from the nature of the interaction among student teacher, children, and the cooperating teacher.

Placing the student teaching experience in the context of the total interactional process of teacher preparation will facilitate an understanding of many factors, such as rigidity, that enter into the student teaching situation. A consideration of teacher education as a social system identifies teacher behavior as a product of institutional expectations on the one hand and individual needs (attitudes, values, and abilities) on the other. The expectations define four different roles that teachers assume over the total time of their preparation experience. These are the roles of student, pre-service teacher, beginning teacher, and experienced teacher. It is within the pre-service teacher role that student teaching usually occurs.[4]

The student role is defined primarily by the college through its institutional expectations. The preservice role has in it additional sources of expectations because

of the presence of student teaching. The college supervisor conveys the expectations of the college to the student, but in addition, the cooperating teacher conveys those of the school, and, insofar as the classroom is a unit within the school, the children also convey their expectations of what their student teacher should do. It is the interaction between the needs of the individual student teacher and all of these role expectations that determine his behavior.

There have been studies of interactions between student teacher and cooperating teacher,[5] between these two and supervisors,[6] and between student teachers and children.[7,8] Studies of the last two groups have been primarily concerned with children's views of the student teacher and achievement of children in a student teacher's class. In an attempt to enlarge our understanding of what occurs in the interaction between student teacher and children, Brottman identified teacher role expectations and certain personality characteristics of student teachers and their cooperating teachers and related these characteristics to classroom climate perceived by children.[9] Climate refers to the feelings aroused through participation in a particular setting over a period of time.[10] In Brottman's study, climate measures were associated with teacher personality characteristics, but they did not discriminate between teachers identified as either institutional (highly structured) or individual (unstructured) in their <u>perception</u> of role expectations. Most important, there were no attempts to relate teacher behavior to either personality characteristics or to climate scores.

In terms of the psycho-social model, teacher behavior should be related to both role expectations and personality characteristics since it is defined as the outcome of these two sets of variables. Insofar as classroom climate is a reflection of role expectations, it, too, should be related to behavior.

Design of Study

Purpose: This study represents an attempt to explore the relationships among the variables one would expect to be important on the basis of the psycho-social model of teacher education. Drawing on that model, several sets of variables suggest themselves as possibilities for fruitful investigation. Namely, this study attempts to detect any significant relationships between student teachers' perceptions of their roles as teachers, their needs and attitudes, their observed behavior in the classroom setting, and their students' perception of the classroom climate.

Instrumentation: Using Brottman's psycho-social model as a basis,[11] we chose several instruments already in wide use which presumably measured some of the variables of interest. For example, roles and their associated expectations were measured with the Teacher Role Description[12] (TRD). The TRD contains 60 items; 5 replications of 2 items each. It purports to measure perception of expectations of the teacher role as being oriented toward institutional (nomothetic), individual (idiographic), or transactional (middle) types. Reliabilities are .87, .83, and .92 respectively.

Needs were measured with the Edward's Personal Preference Schedule (EPPS). The EPPS contains 225 items and purports to measure 15 manifest needs associated with the personal preference schedule. The scales and their reliabilities are: achievement .74, deference .78, exhibition .74, autonomy .83, affiliation .77, heterosexuality .85, succorance .78, nurturance .79, aggression .78, order .87, change .87, endurance .86, intraception .86, dominance .87, and abasement .88.

In addition, attitudes relating to teaching and children were defined by student teachers' responses to the Minnesota Teacher Attitude Inventory (MTAI), which contains 150 items with a reliability of .87. Two scoring methods were applied to MTAI data, that suggested by the test manual, and a second, proposed by Leeds as being more suitable for student teachers.[13]

Classroom climate was measured through childrens' responses to My Class Inventory.[14] The Intermediate form contains 45 items which are grouped into five scales. The scales and their reliabilities are: satisfaction .75, friction .70, competition .56, difficulty .51, and intimacy .54.

Observations of student teachers and children were made using the Classroom Observation Record (COR).[15] A more thorough justification of the use of the Ryans' scale is in order, since it may not be the most obvious choice of an observation instrument. Our decision to use the COR, as opposed to devising our own categories or using one of the other well-known observation schedules such as OScAR, was made on several grounds, some purely practical. Since supervisors of student teachers were to make the observations (along with a research assistant), it was necessary to limit the amount of time required to learn to use the instrument. The supervisors were already working within a very tight schedule, so the Ryans' scales suggested themselves as the most straightforward and easiest to learn to use.

Another reason behind our choice of the COR was that the scale and the categories were more global than those of other instruments and thus seemed to lend themselves more readily to the other dimensions of our problem. The fact that it did not require intensive in-class concentration, allowing the supervisors to make other types of observations during their visits to student teachers' classes, was also in its favor.

As to the characteristics of the Classroom Observation Record, these are described fully by Ryans in his study of teachers.[16] Briefly, ' it will be recalled that there are 22 separate seven-point scales, four characterizing student behavior, th the rest teacher behaviors. The end points of each scale are defined by descriptive dichotomous adjectives, such as partial -- fair, and harsh -- kindly. To objectify judgments, Ryans provides several behavior descriptions characteristic of each end of the scale.

We should note here, too, that our use of the COR differed from Ryans' procedures somewhat. Several different observations by the research assistant and one of the three student teaching supervisors took place soon after the students had been placed in the first of their two student teaching assignments. The original intent of these observations was to attempt to establish inter-rater agreement, since no "senior" rater was available who could teach us to use the instrument. We presumed that if agreement were sufficiently high between two raters viewing the same student teacher simultaneously (contrary to Ryans' suggestion of observations separated in time), then either of these raters was sufficiently adept with the COR to proceed to use it in the main task of our research. In fact, inter-rater agreement on the six test instances was considered sufficient for our purposes. Out of 132 separate ratings (i. e., six different trials using the 22 seven-point scales of the COR) made by the research assistant and each of the three student teacher supervisors, 89 percent (118) of the ratings were either in exact agreement or one catagory apart on the seven-point scale. Ninety-eight per cent, or 129 out of 132, judgments were within two categories of one another. Virtually all were in agreement as to which side of the midpoint they fell on.

Sample: Our overall sample consisted of 39 student teachers enrolled in a masters degree program for elementary school teachers. They comprised most of the participants in that program for the past two years. There were 33 females, and 6 males in the sample. As a group they tended to be exceptionally bright, liberal arts graduates from rather more prestigious institutions. Table 1 presents the unvariate statistics characterizing these student teachers.

Much of the data used in the following analyses are partial, however, since at various points in the conduct of the research, complete data could not be collected due to lack of human resources, non-cooperation, pressures of time, or unusable responses.

Procedure: Student teachers agreeing to participate in the study were given the MTAI, EPPS, and TRD. These data were collected early in the Fall Quarter, and represent responses by subjects who had not yet entered teacher training. In those classes where observations were made, they were begun the following February, shortly after the student teachers had been placed in their first practice teaching assignments. The observations were carried on through the school term.

With the placement of the student teachers in their second assignment (Spring Quarter), arrangements were made with four of the cooperating teachers to administer the My Class Inventory twice (pre-post) in four classrooms (Pretest N=158, Posttest N=127). The first administration was made before the student teacher had become active in class, the second was toward the end of the student teacher's tenure in the class (June). Two of these classes were in typical inner-city schools (grades 4 and 5), one in an experimental education center in the inner-city (grade 3), and one in a private school, populated largely by upper-middle class children (grade 4).

Another eleven classrooms (N=298) took the posttest My Class only (that is, near the end of the student teacher's term with the class). Thus, there was a grand total of 15 classrooms for which My Class responses were available. Following Anderson,[17] we took the mean scores on each of the five scales to be characteristic of the entire class.

Systematic observations of the student teachers were made on part of the total sample only. Varying numbers of observations using the COR were made on a given teacher. Where possible, we averaged the results of observations to attempt to obtain a truer picture of the student teacher in a pre-posttest type of series. That is, for the relevant student teachers, we attempted to obtain a sort of modal observational profile, using the rating scales, for the early stages of student teaching ("pretest") and in the late stages ("posttest").

RESULTS AND DISCUSSIONS

We present the findings in several sections. In general, we attempted the most powerful analysis possible, given the limitations on degrees of freedom imposed by having varying (and at times, extremely small) numbers of subjects available for a given test. Our overall intent was to attempt to locate, on a tentative basis, any apparently strong relationships between needs, expectations, attitudes, teaching behaviors, and classroom climate, but due to differing sample sizes and membership we are able only to present the data rather piecemeal at this point in time.

Pre and Posttest Classroom Climate Changes

The data given in Table 2 would seem to indicate that at least on one of the scales of the My Class Inventory, the presence of the student teacher in the class makes a difference. The children in the four classes administered both pre- and posttest My Class showed a significant mean change on the "satisfaction" dimension. The satisfaction scale contains questions such as "Children enjoy their schoolwork in my class." The direction of the change indicates a decrease in childrens' satisfaction with the class at the end of the student teacher's term.

It is of interest to note the finding by Flanders, et al.,[18] that in the sixth grade pupils measured in their sample, there was a significant decline in favorable attitudes toward school between October, January, and May. Whether the present finding that satisfaction decreases between approximately April and June can be accounted for as an artifact of the passage of time, or whether it is truly due to the presence of the student teacher cannot be determined from these data. Obviously, a control group of children is required, and we trust that any further research will contain such a group.

We suspected that male and female students might perceive the climate differently, but no significant overall mean differences were found. It should be pointed out however, that analysis by classes, rather than by total sample, revealed significant male-female differences within some classes. It seems possible, then, that some sex differences in perception of classroom climate may be associated with some teachers but not others.

In one class girls were significantly higher on satisfaction, while in another the opposite was true. We cannot account for this difference and it would seem to present an interesting direction for further research.

My Class and the EPPS, MTAI, and TRD

Using the data from 15 classrooms for which we had My Class scores, we assigned the mean My Class scores to the respective student teachers. Canonical correlations were performed to attempt to relate classroom climate measures to personality needs as measured by the EPPS and role perceptions measured by the TRD. These comparisons failed to yield any clearly interpretable relationships. We concluded that, overall, the student teachers' perceptions of their needs and roles, measured prior to their entry into the student teaching program, are of no use in predicting what the classroom climate will be in the classes where they practice teach.

A further attempt was made to relate each of the five My Class scales separately and in combination based on factors extracted from a principal components analysis of the My Class data, to the EPPS scales, and the TRD data. MTAI scores (two sets arrived at by standard scoring and Leed's scoring methods) were also inserted as variates. Scattered correlations were significant, but no clear pattern of relationship appeared in these data.

On the basis of some previous work with the My Class Inventory,[19] we expected to find some relationships between personality variables of the student teachers and classroom climate. Regressing the My Class data from 15 classrooms on MTAI and TRD scores, we found no significant relations of climate measures with the MTAI (using either the standard and Leeds' scoring systems); nor the TRD scores. That is, neither the MTAI nor the TRD scores of the student teachers proved to be adequate predictors of classroom climate.

The same was true of the EPPS. None of the multiple regressions nor the canonical correlations using all five scales of the My Class as criteria, and subsections

(due to small n available) of the EPPS as predictors, yielded significant results.

Hence, we conclude that, as far as the measures used here, we can formulate no clear relation between the student teachers' perceptions of role, personality needs, nor attitudes toward children and the classroom climate measures.

The seemingly total lack of meaningful relations among needs, attitudes, role perceptions and climate raises some vexing questions, which unfortunately we cannot for the moment answer. We cannot explain the lack of interpretable relationships, since indeed we would expect some/on logical grounds. Thus, we do not know whether the measures themselves are inadequate, /or the timing bad (perhaps student teachers change significantly in needs, role perceptions and attitudes toward children between September and June). Too, perhaps the student teacher does not affect the climate as directly as we had thought, and other conditions may be causing changes in My Class responses.

Observations and Other Measures

Systematic observations were made of some of the student teachers during their practice teaching experiences. We were interested in trying to find relationships between what we observed and the several other categories of variables we were measuring.

First, we wished to determine whether any changes could be observed as the student teachers gained in experience. That is, were there any observable differences in the way they taught between February-March period, and that of May-June. If differences did appear, would these relate systematically to classroom climate measures?

Secondly, we wished to determine, from an exploratory point of view, whether we could discern behaviors in student teachers that would relate to any of the paper-and-pencil tests we had administered earlier. Specifically, we wish to discover if anything systematic might be said about the student teachers' role conceptions, their personal needs, and their attitudes toward children vis a vis their behavior as teachers.

Early vs. Late Behaviors of Student Teachers: Table 3 indicates the scales of the COR on which significantly different mean values were found when "early" (February-March) and "late" (May-June) observations were compared. Out of the 22 scales compared, significant mean differences were detected on three. These changes indicate that the student teacher tends to become more initiating, democratic, and "broader" in his presentations over time.

The data in Table 3 are based in changes in mean values on each of the 22 scales of the Ryans' instrument taken in turn. The mean values for each student teacher on the Ryans' scales were created using several observations in some cases, and averaging them to obtain "early" and "late" means scores.

But it is also of interest to attempt to determine whether there is an overall shift in the behavior of the student teachers. That is, even though only three of the 22 scales of observed behavior showed a significant mean shift, it might be possible that there is a general movement to the student teachers' behavior not revealed by the 22 discrete T-tests.

We therefore tested the hypothesis that student teachers increased in "goodness" over time. To do this, we capitalized on the rather value-laden (in our opinion) nature of the Ryans' scales. It is obvious to us that there is a "good" and "bad" side to each scale; e.g., "autocratic" would be bad, and "democratic" good, "harsh" "bad" and "kindly" good, and so forth. If the early observations of the student teachers were taken as a baseline, the question could then be raised as to whether the changes away from the baseline in later observations had a discriminable pattern. That is, do the repeated observations of the same student teachers reveal a general movement toward the "good" or the "bad" side of the scales?

Using a sign test, of 176 discrete observed changes, 123 of them were in the "good" direction. The z-score, based on the direction of change was 5.30, which has a

p value far less than .001. Thus, we conclude that student teachers, as measured by repeated observations made independently by four observers, do become "better," that is, they move toward being fairer, more democratic, more responsive, kindlier, etc.

Observations and Climate: Since the observations seemed to be picking up some of the changes in student teacher behavior, it seemed reasonable to attempt to relate observations to the measures of classroom climate (My Class). In order to test the interrelationship between our climate measure (My Class) and observations, it was necessary to use only those classrooms in which terminal (June) observations had been made as well as the final test with the My Class Inventory. Seven classrooms met these criteria, thus placing extreme limitations on the type of statistical analysis that could have been performed.

Since an indication of the overall relationship between the observations and the climate measures was warranted, and a multiple regression analysis was not possible due to the small number of degrees of freedom, we chose to treat the data using the Kendall Coefficient of Concordance.[20] This measure yields an overall score which is, in essence, an average of each subject's rank on every variable. If the ranks tend to be the same for a given subject (i.e., all high or all low), then the null hypothesis of randomness of rankings may be rejected.

One obvious comparison had to to do with the relationship of "late" versus "early" teacher behaviors and pre- and posttest scores from My Class. The question is whether the late climate scores are more closely related to observed teacher behavior than the earlier. One would expect, if the student teacher were affecting children's perception of classroom climate, to see a closer relationship between what he did late in the quarter as opposed to early.

We tested, therefore, whether or not the coefficient of concordance was greater for the earlier association of observations and climate or the later. The "late" data is comprised of seven classes and their student teachers. The "early" comprised four of those

seven. Using all rankings of all 22 scales from the COR and all five My Class scales, the following was found:

Early data: $W = .51$, $s = 1871$, $p < .01$
Late data: $W = .39$, $s = 8155$, $p < .001$

Both of these coefficients are well beyond the .01 level of probability, indicating that both early and late behaviors of the student teacher are significantly related to the classroom climate, as perceived by the children in the class. However, it will be noted that a stronger relationship exists between the earlier observations and climate than the later ones. Whether or not this is a significant difference is indeterminate. But both results do suggest that student teacher behavior and classroom climate are related. It does <u>not</u> support the expected increase in relationship as the student teacher becomes more comfortable in the teacher role.

For further comparisons of the seven classrooms from which data were drawn to make the above comparisons, we accepted Ryans' suggestion that the scales loading highest on his X_o, Y_o, and Z_o patterns be used for research purposes.[21] The three comparisons using the coefficient of concordance for judging the relatedness of Ryans' X_o, Y_o, and Z_o patterns and the five scales of classroom climate yielded the following results:

Pattern X_o with My Class: $W = .32$, $s = 716$, $p < .01$.
Pattern Y_o with My Class: $W = .41$, $s = 555$, $p < .01$.
Pattern Z_o with My Class: $W = .53$, $s = 452$, $p < .01$.

Notable here is the fact that all three patterns from the COR are significantly related to classroom climate. The fact that all three patterns correlated with the same five classroom climate measures may call into question the independence of the Ryans' patterns, at least with regard to these data. Indeed, if the data size had allowed it,

a factor analysis would probably have revealed that all the observations made on the student teachers in this sample were aligned with one factor -- probably a "good-bad" factor at that. If this were true, the significant correlations of the three patterns and the My Class scores make more sense. For example, for Pattern Z_o, the student teachers who are more "stimulating" (as opposed to "dull") and more "original" (as opposed to "stereotyped"), tend to be found in those classes where the children express more satisfaction, where there is more friction, and where there is more intimacy. The same would tend to hold for the other two patterns the "good" observed characteristics tend to covary with the high satisfaction, friction, and intimacy as perceived by the children.

Classroom Observations, Perception of Role, Needs, and Attitudes

Table 4 contains significant correlations between classroom observations (COR), role perceptions (TRD), needs (EPPS), and attitudes (MTAI, Leeds scoring). There is a clear and consistent relationship between 7 of the COR scale scores and teachers who see themselves assuming a highly structured, institutional (nomothetic) role. Five of these comprise Ryans' X_o pattern.

Four observation scale scores are associated with a middle (transactional) role and two are related to an unstructured (idiographic) role. There are scattered significant correlations between behavior, needs, and attitudes. They do not supply sufficient evidence to define a clear relationship between observed behavior and specific personality characteristics except as they may allow us to explain other relationships.

It does appear that certain teacher behaviors and role perceptions are related. Of the three role positions taken, the more highly structured is associated with more (7) identified behaviors; the least highly structured with fewer (2) behaviors. So, while all three role positions relate to "harsh-kindly" and "aloof-responsive," the highly structured role alone relates to "partial-fair," "autocratic-democratic," and "immature-integrated."

The Ryans' behavior scales use a scoring range of 1-7 representing "bad" to "good" behaviors. The seven behaviors significantly correlated with highly structured roles are kindly, understanding, fair, democratic, responsive, poised, and integrated behaviors. Furthermore, those teachers that are kindly and understanding also have positive attitudes towards children; understanding is associated with a low need to belong; fairness is associated with a low need for aggression.

These data support the idea that student teachers who see themselves as more highly structured than other teachers, and following institutional expectations, demonstrate behaviors highly valued in the educational profession. This is <u>not</u> to say that perception of a less structured role is associated with "bad" behaviors; less structured role is related only to "understanding" and "responsive" behavior.

Insofar as Ryans' patterns correlated significantly with climate measures, and pattern X_o correlated significantly with highly structured role perception, on logical grounds we would expect to find some relationships between elimate and role perception. However, as reported earlier, no relationships between these variables were demonstrated. This poses the question of the nature of the relationship between climate, role, and teacher behavior. At this time we can suggest that teacher behavior clearly relates to both, but either the time of measurement, and/or the instruments, or the small sample precludes establishing a direct relationship among them. Perhaps teacher behavior relates more clearly to climate through pupil behavior rather than through role perception. Certainly other variables operating within the classroom should be included in any extension of this direction of the research.

SUMMARY AND CONCLUSIONS

The investigation of the interrelationships among student teachers' role perceptions, personality characteristics, observed classroom behavior, and children's perception of classroom climate has yielded the following results:

1. Classroom Climate Changes. There was a decrease in satisfaction in classroom climate from the time before the student teacher entered the class to after the teacher had taught for a while.

2. Relationships among Scores of My Class, EPPS, MTAI, and TRD. There was no clear relationship between student teachers' perceptions of role, personality, needs, attitudes towards children, and classroom climate measures.

3. Early Vs. Late Specific Behaviors of Student Teachers. Student teachers were observed to become more initiating, democratic, and broader in their presentations over time.

4. Early Vs. Late Overall Shift of Behaviors of Student Teachers. There was a significant overall shift in student teachers' behavior towards the "better" side of the scales. Thus, they tended to become more democratic, responsive, understanding, kindly, optimistic, responsible, steady, poised, systematic, stimulating, and original.

5. Classroom Climate and Observations of Behavior. Teacher behavior is significantly related to classroom climate with no clear difference between early or late measures of behavior and climate.

6. Classroom Climate and Patterns of Teacher Behavior

Climate measures taken together are significantly related to each of Ryans' patterns of teacher behavior.

7. Classroom Observations, Perception of Role, Needs, and Attitudes

There are significant relationships between certain patterns of teacher behavior and perception of role. More behavior measures are related to highly structured role than to any other. Behavior related significantly to some needs and attitudes.

It appears that although teacher behavior is significantly related to classroom climate in general, only children's perceptions of satisfaction decrease in classrooms with the presence of a student teacher. This decrease in satisfaction paralleled the teachers allowing greater freedom for the children in the classroom as well as the shift among teachers toward those behaviors more highly valued in education. If accepted as given, the results would appear to present data contrary to logical expectations. However, if we consider classroom climate as something established primarily by the cooperating teacher before the appearance of the student teacher, then despite what appears to be desirable changes in teacher behavior, children are increasingly dissatisfied with the presence of a new teacher in the classroom. It is well known that student teacher-cooperating teacher relationships engender considerable affect. These results may identify the decreasing satisfaction of children as a reflection of the strains of the teachers relationship. Unfortunately there were no accompanying changes in friction, competition, difficulty, or intimacy.

It also may be true that the relation between student teachers' characteristics and classroom climate is really artifactual, and more complex than the data indicate. For example, suppose a student teacher were led to choose a cooperating teacher (as the students in the present instance were allowed to do). He might choose someone congruent

with his own personality, the dictates of that choice being the subtle, subconscious workings of his needs and values. So, in fact, the student teachers' choice might be determined by his ideal image of himself as a teacher. But this in turn might be an unrealistic image. Hence, the student teacher's needs and attitudes might not mesh with the pervasive climate of the class. Whatever changes took place in the class might be reactions against the student teacher by the class and/or the cooperating teacher, rather than the closer connection as time went on which we have hypothesized in this paper. Now, might it not be that the cooperating teachers' influence is so pervasive that little the student teacher does or does not do will really have much effect except inasmuch as he provides a sort of foil against which the cooperating teacher may play out her role.

The relationship of all climate measures taken together to Ryans' X_o, Y_o, and Z_o, patterns, although somewhat dissapointing in that all patterns correlated with the same five climate measures, suggested at least that climate is a dimension associated with teacher behavior. Insofar as Ryans' patterns were developed from a large number of teachers, a considerable increase in the number of classrooms yielding climate measures might allow a discrimination among climate scales and each of the patterns.

Perhaps the greatest disappointment in this study was the absence of relationships among measures of perception of teacher role, personality needs, attitudes toward children, and classroom climate measures. However, other researchers have found relationships.

Relating Catell's 16 P F questionnaire to climate measures, Anderson found that interns with a measured personality constellation which describes a nervous, tense, anxious, group-oriented individual seem to have classes where much friction, competition, and difficulty with school work are reported by pupils. These classes also report little satisfaction and intimacy among class members. The opposite climate was reported for independent, self-sufficient teachers.

In an earlier study[22] TRD, MTAI, And EPPS scores of student teacher and cooperating teacher pairs were related to My Class scores. Teacher pairs higher on the (TRD) institutional (highly structured) scale, had satisfaction of children significantly and positively associated with attitudes toward children, and (EPPS) deference, order, abasement, and endurance. Conversely, teacher pairs high on the (TRD) individual (unstructured) scale, had satisfaction in climate associated with attitudes towards children and (EPPS) exhibitionism, autonomy, succorance, change, heterosexuality, and aggression. In the present study only student teachers' scores were used and no relationships among the variables were established. The explanation of the failure is perhaps best provided by Getzels and Jackson.

> . . .despite the critical importance of the problem and a half-century of prodigious research efforts, very little is known for certain about the nature and measurement of teacher personality, or about the relation between teacher personality and teaching effectiveness.[23]

In other words, inconsistent results are not unexpected in dealing with measurements of teacher personality characteristics.

Placing the student teaching experience within the context of the total classroom appears to be a productive avenue for further research on the importance of this experience to the student, his cooperating teacher, and to his children. Although the direct measures attempted of the relationship of role perception to personality characteristics were not fruitful, the indirect measures of these through classroom climate, role perception and teacher behavior do support the basic rationale of the psycho-social model that teacher behavior is related directly to certain role expectations and indirectly to personality characteristics.

There are implications of these results for teacher training programs. Before a student teaching experience, the prospective teacher should develop skills which

ssnsitize him to children's perception and responses to him in a classrcom, particularly those responses not measured by achievement test scores.

The use of the COR by student teacher supervisors as a basis for providing feedback to the student should be explored further. Perhaps by comparing observations of the teaching behavior/ of the cooperating teacher with those of the student teacher, ctrategies could be devised to avoid potential conflicts through early identification of areas of agreement and divergence.

Finally, there is a need to identify techniques for acquiring and processing information about teacher personality characteristics that would relate clearly and consistently to other dimensions of the world of the classroom.

TABLE I

MEANS AND STANDARD DEVIATIONS OF STUDENT TEACHERS ON EPPS, MTAI, AND TRD (N=39)

	Mean	S.D.
EPPS		
Achievement	13.23	4.94
Deference	10.67	4.05
Order	7.13	3.58
Exhibitionism	12.28	2.90
Autonomy	15.28	4.66
Affiliation	17.59	3.65
Intraception	19.05	4.47
Succorance	13.79	4.30
Dominance	12.49	3.57
Abasement	13.77	5.35
Nurturance	17.00	4.55
Change	18.36	4.94
Endurance	11.00	5.05
Heterosexuality	16.72	4.89
Aggression	11.82	4.08
TRD		
Nomothetic	30.87	8.62
Transactional	47.38	8.43
Idiographic	38.74	9.19
MTAI		
(Standard Scoring)	64.15	18.04
(Leeds Scoring)	33.87	10.43

TABLE 2

COMPARISONS OF MEANS BY T-TESTS OF 5 SCALES OF
THE MY CLASS INVENTORY - PRETEST (N=158) VS. POSTTEST (N=127)

My Class Scale		Mean	S.D.	Difference	T-Test	Signif.
Satisfaction	Pre	19.94	4.59	1.33	2.111	.036
	Post	18.61	6.05			
Friction	Pre	19.91	4.09	-0.06	-0.13	1.00(Approx)
	Post	19.97	4.26			
Competition	Pre	20.72	4.09	0.41	0.81	0.419
	Post	20.31	4.53			
Difficulty	Pre	15.98	3.32	0.61	1.50	0.136
	Post	15.36	3.58			
Intimacy	Pre	21.34	4.00	0.56	1.19	0.235
	Post	20.77	3.94			

TABLE 3

EARLY (FEBRUARY-MARCH, N=11) VS. LATE (MAY-JUNE, N=17)
OBSERVATIONS, T-TESTS (SIGNIFICANT DIFFERENCES ONLY)

Classroom Observation Record Variable:		Mean	S.D.	Difference	T	P
Dependent - Initiating	Early	4.36	1.29	-1.11	-2.09	0.047
	Late	5.47	1.42			
Autocratic - Democratic	Early	4.82	1.47	-1.12	-2.38	0.025
	Late	5.94	1.03			
Narrow - Broad	Early	3.18	0.87	-1.70	-3.13	0.004
	Late	4.88	1.65			

TABLE 4

CLASSROOM OBSERVATIONS, ROLES, NEEDS, AND ATTITUDES:
(SIGNIFICANT CORRELATIONS ONLY; N=11)

	TRD			EPPS				MTAI
Observation Scales*	Nomo.	Trans.	Idio.	Affil.	Aggres.	Exhib.	Hetero.	(Leeds)
Harsh-Kindly (X)	.76	.71	.66					.68
Restricted-Understanding (X)	.62	.66		-.68				.64
Partial-Fair	.63				-.62			
Autocratic-Democratic (X)	.63							
Aloof-Responsive (X)	.86	.80	.74					
Apathetic-Alert (pupils)					-.73			
Excitable-Poised (Y)	.71	.61						
Immature-Integrated	.66							
Disorganized-Systematic (Y)						.76		
Narrow-Broad						.67		
Pessimistic-Optimistic (X)							.64	

*Letters in parentheses after some scales indicate the Ryans' patterns they relate most closely to.

$r \geq .602$, $p = .05$

$r \geq .735$, $p = .01$

References

1. Samuel Hall's Seminary in Plymouth, New Hampshire, apparently included teaching in a practice school.

2. Gordy, J. P. "Rise and Growth of the Normal School Idea in the United States," Bureau of Education, Circular of Information. No. 8, Washington, D.C., 1891. p. 14.

3. Association for Student Teaching. Curriculum Trends and Teacher Education, 32nd Year Book. The Association, 1953. pp. 36-37.

4. Brottman, Marvin A. "A Psycho-Social Model of Teacher Education," Paper presented at AERA, 1970 and ERIC Clearinghouse on Teacher Education, November, 1969.

5. Horowitz, Myer. "Student Teaching Experiences and Attitudes of Student Teachers, Journal of Teacher Education, 19(1968), 317-324.

6. Yee, Albert H., "Interpersonal Relations in the Student Teaching Triad," Journal of Teacher Education, 19(1968), 95-112.

7. Veldman, Ronald T. and Peck, Robert F. "Student Teacher Characteristics from the Pupils' Viewpoint," Journal of Educational Psychology, 54(1963), 346-355.

8. Frankiewicz, R. G., and Merrifield, R. R. "Student Teacher Preferences as Predictors of Their Teaching Behavior," Ohio: Kent State University, 1966. Mimeo.

9. Brottman, Marvin A. "Roles and Personality Interaction Between Prospective and Cooperating Teachers," Chicago: University of Chicago, 1969. Mimeo.

10. Walberg, Herbert and Anderson, Gary. "Classroom Climate and Individual Learning," Journal of Educational Psychology, 59(1968), 414-419.

11. Brottman, "A Psycho-Social Model of Teacher Education," op. cit.

12. Horowitz, Myer. "Role Relationships in Student Teaching Settings," Unpublished Doctoral Dissertation, Stanford University, 1965.

13. Leeds, Carroll, H. "Predictive Validity of the Minnesota Teacher Attitude Inventory," Journal of Teacher Education, 29(1969), 51-56. Scoring procedures in a personal communication with the author.

14. Walberg, op. cit.

Anderson, Gary J. "An Exploratory Analysis of the Elementary School Internship," Quebec, Canada: McGill University, 1969.

15. Ryans, David G. "The Classroom Observation Record," Mimeo, n. d.

16. Ryans, David G. Teacher Characteristics Study. Washington: American Council on Education, 1960.

17. Anderson, op. cit.

18. Flanders, N. A., Morrison, Betty M., and Brode, E. L. "Changes in Pupil Attitudes During the School Year," Journal of Educational Psychology, 50(1968), 334-338.

19. Anderson, op. cit.

20. Siegel, Sidney. Non-parametric Statistics for the Behavioral Sciences, New York: McGraw-Hill, 1956. Pp. 229-238.

21. Ryans, Teacher Characteristics Study, op. cit. The Scales are:

X_o	Y_o	Z_o
Autocratic-Democratic	Evading - Responsible	Dull - Stimulating
Aloof - Responsive	Erratic - Steady	Stereotyped - Original
Restricted - Understanding	Excitable - Poised	
Harsh - Kindly	Disorganized - Systematic	
Pessimistic - Optimistic		

22. Anderson, op. cit.

23. Brottman, Marvin A. "Roles and Personality Interaction between Prospective and Cooperating Teachers," op. cit.